IN THE SPECIFICATION:

Please amend the specification of the above-identified application by entering the following paragraphs, as set forth below in marked-up form. In accordance with the new amendment format now permitted, a clean copy of the specification has been omitted.

Beginning on page 2, line 23:

In order to attain the above object, an image pickup device according to the present invention is characterized in that a refractive index distribution lens having a refractive index distribution which is ~~substantially~~ inversely proportional to the square of the distance from the optical axis in a cross-section vertical to the optical axis is provided as an imaging lens in the neighborhood of the imaging face of the image pickup element.

Beginning on page 4, line 1:

The image pickup device of the present invention is basically characterized in that a refractive index distribution lens having a refractive index distribution which is substantially proportional to the square of the distance from the optical axis in cross-section vertical to the optical axis is provided as an imaging lens in the neighborhood of the imaging face of an image pickup element. The lens length is preferably set to a meandering period $P = 0.5\pi + n\pi$ ($n = 0, 1, 2, \ldots$). Particularly, it is preferable that the lens length is as small as possible (for example, n = zero) because the lens length can be shortened.

Beginning on page 4, line 12:

The image pickup device of the present invention can be embodied in such a manner that the refractive index distribution lens and the image pickup element are held by a holder to regulate the positional relationship between the refractive index distribution lens and the image pickup element. However, it may be embodied in such a manner that the refractive index distribution lens is directly adhesively attached to the image pickup element. In this case, the positional relationship between the refractive index distribution lens and the image pickup element can be controlled with extremely high precision if a material which ~~has~~ gives no adverse effect ~~on~~ to the lens and the image pickup element is merely selected as the adhesive agent.

Beginning on page 5, line 22:

Fig. 2 is a diagram showing the overall shape of the refractive index distribution in relation to the cross-sectional area vertical to the optical axis. ~~relationship between spatial frequency and modulation of MTF of the optical characteristic obtained by the image pickup device of the present invention~~;

~~Fig. 3 is a diagram showing the relationship between defocusing position and modulation of MTF of the optical characteristic obtained by the image pickup device of the present invention;~~

Fig. ~~4~~ 3 is a cross-sectional view showing another embodiment of the image pickup device of the present invention; and

Figs. ~~5A~~ 4A to ~~5C~~4C are cross-sectional views showing various modifications of a refractive index distribution lens of the image pickup device according to the present invention.

Beginning on page 7, line 15:

In this case, the calculation is made under the condition that the thickness of the adhesive agent 3 is neglected, the emission-side end face of the refractive index distribution lens 1 is brought into direct contact with the imaging face and the existence of the infrared-rays cut filter 6 (thickness, characteristic) is neglected. In the above equation, A represents ~~a~~ one of the focusing ~~parameter~~parameters. The lens diameter is set to 1.8mm, and thus the refractive index distribution lens 1 of this embodiment is optimum to a 1/10-inch image pickup element 4. This is because the length of the diagonal line of the 1/10-inch image pickup element 4 is equal to 1.8mm. That is, such a lens 1 is provided on a 1/10-inch image pickup element 4 to obtain an image of a diagonal view angle of 100 degrees. In addition, an infrared-ray image can be removed from the image thus obtained because the infrared-ray cut filter 6 is provided.

Beginning on page 8, line 13:

~~Figs. 2 and 3 show MTF (modulation transfer factor) of the optical characteristic obtained at this time. In Fig. 2, the abscissa represents spatial frequency (cycle/mm) and the ordinate represents modulation, and in Fig. 3, the abscissa represents defocusing position (mm) and the ordinate represents modulation.~~Fig. 2 shows the overall shape of the refractive index distribution in relation to the cross-sectional area vertical to the optical axis.

The above-described image pickup device is an embodiment of the present invention, and the present invention may be embodied in various modes. First, in order to cut infrared rays, infrared rays may be reflected by an

infrared-ray cut filter film 6, or an optical element 7 for absorbing infrared rays may be provided at the light incident face side of the refractive index distribution lens 1 to cut infrared rays as shown in Fig. ~~4~~3.

As shown in Figs. ~~5A to 5C~~4A to 4C, a lens provided with curvature at both or one of the light incident face and the light emission face thereof (as indicated by reference numerals 1a, 1b, 1c in Figs. ~~5A to 5C~~4A to 4C) may be used as the refractive index distribution lens 1.